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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 10/605,449 | 09/30/2003 | Dennis R. Conti | BUR920030050US1 | 2448 |
| 26679 | 7590 | 12/10/2004 | EXAMINER | |
| DRIGGS, LUCAS BRUBAKER & HOGG CO. L.P.A. DEPT. IBU 8522 EAST AVENUE MENTOR, OH 44060 | | | HOLLINGTON, JERMELE M | |
| | | ART UNIT | PAPER NUMBER | |
| | | | 2829 | |

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/605,449 | CONTI ET AL. |
| | Examiner | Art Unit |
| | Jermele M. Hollington | 2829 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 September 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/30/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a monitor [claim 7] and means to control the temperature [claim 12] must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 11 is objected to because of the following informalities: in line 1, the limitation "the heat sink" should be change to --a heat sink-- in order to avoid an insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Gamache et al (6577146).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Gamache et al disclose [see Figs. 1-2] a method of controlling the burning in of at least one I/C chip (IC chip 12) in a burn in tool (test fixture 8), wherein said tool (8) has a device (socket 22) for mounting each chip (12) to be burned in, and a power source (power source 22) to supply electrical current to burn in each chip (12), comprising the steps of:

continuously monitoring [via computer 48] at least one electrical value input to each chip (12) selected from the group of current, voltage and power, and varying the voltage [via combination of computer 48, power sensor 46 and power source 44] to maintain at least one of the values at or below a given value.

Regarding claim 2, Gamache et al disclose the voltage is varied [via combination of computer 48, power sensor 46 and power source 44] to maintain the current value at or below a given value.

Regarding claim 3, Gamache et al disclose maintain [via combination of computer 48, power sensor 46 and power source 44] the power value at or the voltage is varied to below a given value.

Regarding claim 4, Gamache et al disclose each device temperature is monitored [via chip heat sensor 42] and the voltage to each device is varied [via combination of computer 48, power sensor 46 and power source 44] to maintain the device (22) at or below a given temperature.

Regarding claim 5, Gamache et al disclose a heat sink (heat sink 28) in contact with the device (22).

Regarding claim 6, Gamache et al disclose the device temperature of each device (22) is monitored [via chip heat sensor 42] and the temperature of the heat sink (28) is varied [via computer 48] to maintain the device temperature at a given value.

Regarding claim 7, Gamache et al disclose a burn in tool (test fixture 8) for burning in at least one I/C chip (IC chip 12) comprising: a structure (socket 22) for mounting each chip (12) to be burned in; a power source (power source 44) to supply electrical current to burn in each chip;

a structure (computer 48) for continuously monitoring at least one electrical value input to each chip (12) selected from the group of current, voltage and power, and a structure (combination of power source 44 and power sensor 46) to vary the voltage to maintain at least one of the values at or below a given value.

Regarding claim 8, Gamache et al disclose the voltage is varied [via combination of computer 48, power sensor 46 and power source 44] to maintain the current value below a given value.

Regarding claim 9, Gamache et al disclose the voltage is varied [via combination of computer 48, power sensor 46 and power source 44] to maintain the power value below a given value.

Regarding claim 10 Gamache et al disclose a monitor (chip heat sensor 42) to continuously monitor the temperature value of each chip (12) being burned in and wherein the voltage is varied [via combination of computer 48, power sensor 46 and power source 44] to maintain the temperature value of each device at a given value.

Regarding claim 11, Gamache et al disclose a heat sink (heat sink 28) is in contact with each device (22).

Regarding claim 12, Gamache et al disclose the tool (8) has a heat sink (heat sink 28) and temperature monitor (chip heat sensor 42) for each device (22) and each heat sink (28) has means (temperature sensor 38) to control the temperature of the heat sink (28), and the temperature control means [via combination of computer 48, power sensor 46 and power source 44] is varied to maintain the temperature value of each device (22) at a given value.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gussman et al (4567652 & 4584764), Johnson et al (6323665 & 6744269), Gardell et al (6590404) and Gunn et al (6815966) disclose a method and apparatus for burn-in board system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on (517) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jermele M. Hollington
Jermele M. Hollington
Patent Examiner
Art Unit 2829

JMH
December 7, 2004